The requested changes are as follows:

**Page 11, before the “Code and data availability” section:**

An additional section has to be added:

**6** **Validation and uncertainty of primary and derived data products**

The dataset presented in this manuscript comprises primary (raw) and derived data products for a series of sensors. In Table 1 we provide an overview of the sensor types, their sampling intervals and their nominal accuracy. For most of the sensor systems used, the work presented here represents a novel application domain, with custom developed sensor systems applied in a challenging operating regime. In many cases, the extreme environmental conditions and demanding logistics make so that our measurements are the only ones performed in the area over such extended periods of time, hindering direct comparison to other sensors, typically used for validation.

The processing of the derived data products is completely transparent: the complete processing workflow from raw sensor data to the derived data products applying cleaning and aggregation is described in Section 5. Standardized visualizations for every data channel (an example is given in Fig. 6) are provided at https://doi.org/10.1594/PANGAEA.948334 and allow to check the data cleaning and aggregation on a per-channel basis. Note that data offset were corrected only when field site interventions included in the meta data provided an objective reason. No arbitrary stylistic correction is performed.

The processing accuracy of the GNSS observables (input data), to daily coordinates (primary data product) heavily depends on the quantity and quality of the input data. This in turn depends on the satellite availability, the meteorological and atmospheric conditions, on the duration of the data acquisition intervals that in turn depend on the available power as well as the ground kinematics observed. In effect, the accuracy of the primary GNSS data products varies over time and space (between different positions). For this reason, no average/typical values are given for the whole dataset. Instead, quality indicators are available for each daily position fix calculated. For the GNSS data the standard deviation for each axis (E, N, vertical) as well as the ratio of fixed ambiguities is given, the ratio is a percentage that specifies how well the GNSS solver was able to resolve integer ambiguities for fixing a solution – a commonly used quality indicator in GNSS post-processing. For the rtklib solution a static parameter set is chosen for each reference position, i.e. all baseline pairs to the same reference are processed in the same way. The details are in the respective documentation of the tools used.

Furthermore, the accuracy of the daily coordinate fixes depends also on the physical behavior observed (the kinematic of the measured landforms). If the observation point moves significantly during one observation interval (epoch) an average position is computed. For static (non-moving positions) this effect can be easily neglected. For fast motion, or stick-slip events on the contrary, this effect can negatively impact the accuracy of the measurements that basically results in a time offset for the observed displacement. If required a detailed analysis using finer grained temporal scales for the GNSS post-processing can be applied to the input data. On longer temporal scales, a seasonal period in noise can be observed for most stations and especially notable for the reference station. In Fig. 4 and Fig. B2, we show two examples of the seasonal variability in the position of a reference station. This pattern could be explained by the physical behavior of the boulder on which the sensor is mounted. However, because no validation measurements are present, we have to consider this as noise. This noise can be considered irrelevant, because as the feature under investigation usually exhibit a yearly displacement 2-3 orders of magnitude higher than the seasonal, instrumental noise itself (displacement in meters, noise in millimeters). Nevertheless, short-term outliers in the observations should be interpreted carefully, as they can be an amplified result of noise in the reference station (e.g. spikes in RAND and HOGR in Figure A2). A last caveat should be given on the interpretation of the data, which despite hourly to daily resolution, should be interpreted with care at such shorter time scales, critically distinguishing between noise and signals in the data.

Explanation: The manuscript did not receive the editorial treatment. It is missing some key components: Robust validation (Section 3.5 of our Data Policy at https://essd.copernicus.org/articles/10/2275/2018/) and uncertainty and error analysis (Section 3.6).

**P. 17, Caption of Fig. A2:**

Please add the following sentence to the caption:

“For discussion of spike in HOGR that also appear in nearby RAND, see Section 6”.

Explanation: See explanation above.